

LITVINOVA, N.F.; MALYSHEV, V.I.; TUROVTSEVA, Z.M.

Determination of oxygen in sodium and in the alloy Na-K. Trudy
kom.anal.khim. 10:97-102 '60. (MIRA 13:8)
(Oxygen--Analysis)
(Sodium--Oxygen content)
(Sodium-potassium alloys--Oxygen content)

MALIKOVA, Ye.D.; TUROVTSEVA, Z.M.

Determination of oxygen in alkaline earth metals by means of
distillation. Trudy kom.anal.khim. 10:103-108 '60.
(MIRA 13:8)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo
AN SSSR, Moskva.

(Oxygen--Analysis)

(Alkaline earth metals--Oxygen content)

TUROVTSEVA, Z.M.; LITVINOVA, N.F.; VASIL'YEVA, N.M.; SEMENYUK, K.G.

Vacuum-fusion method employing a platinum tand for the determination
of gases in metals. Trudy kom.anal.khim. 10:109-116 '60.
(MIRA 13:8)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo
AN SSSR, Moskva.
(Gases in metals)

KUZNETSOV, L.M.; MAKAROV, Ye.S.; TUROVTSEVA, Z.M.

Application of X-ray structural phase-shift analysis to the
determination of gases in metals. Trudy kom.anal.khim. 10:122-128
'60. (MIRA 13:8)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo
AN SSSR, Moskva.

(Gases in metals)

(X-ray crystallography)

100

PHASE I BOOK EXPLOITATION SOV/3584

Turovtseva, Zinaida Mikhaylovna, and Lev Lazarevich Kunin

Analiz gazov v metallakh (Analysis of Gases in Metals) Moscow,
Izd-vo AN SSSR, 1959. 390 p. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut geokhimi i
analiticheskoy khimii.

Ed.: A.P. Vinogradova, Academician; Ed. of Publishing House:
N.V. Travin; Tech. Ed.: R.Ye. Zendel'.

PURPOSE: This book is intended for scientists and metallurgical
engineers concerned with the gaseous impurities in metals.

COVERAGE: The book presents theoretical principles of determining
gases in metals, describes the equipment and methods used in de-
termining the hydrogen, oxygen and nitrogen content in metals,
and makes recommendations for selecting methods and conditions
suitable for analyses. Data from investigations done by Yu.A.
Klachko and V.A. Zhabina on conditions for the extraction of

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oxygen from metals by the vacuum-fusion method and from research carried out at the Institut geokhimii i analiticheskoy khimii imeni Vernadskogo (Institute of Geochemistry and Analytical Chemistry imeni Vernadskiy) on the use of the vacuum-fusion method are used. Instruments for vacuum-fusion analysis were designed mainly at Institut metallurgii AN SSSR (Institute of Metallurgy of the Academy of Sciences USSR), Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute for Ferrous Metallurgy), and the Institute of Geochemistry and Analytical Chemistry. The research done by S.A. Mandel'shtam and O.B. Fal'kova on the spectrographic determination of oxygen and nitrogen in steel and the work of N.S. Sventitskiy on the spectrographic determination of hydrogen in metals was reviewed in collecting material for this book. The spectral analysis of gases based on the cathode tube discharge method of B. Rosen [American] is also covered along with the use of stable isotopes to determine gases in metals using mass spectrometric and spectral methods, the sulfur method [A.K. Babko], and the bromine-carbon method for determination of the presence of oxygen. According to the authors, the vacuum-fusion method, while adequate for

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determining hydrogen and oxygen, is inadequate for nitrogen determination. Chapter X is devoted to a chemical method developed by B.A. Generozov (Deceased), for determination of nitrogen content. There are 195 references: 33 Soviet, 116 English, 28 German, 9 Japanese, 7 French, 1 Italian, and 1 Dutch.

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AVAILABLE: Library of Congress

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6-24-60

TUROVTSEVA, Zinaida Mikhaylovna; KUNIN, Lev Lazarevich; VINOGRADOVA,
A.P., akademik, red.; TRAVIN, N.V., red.izd-va; ZINDEL", R.Ye.,
tekhn.red.

[Analysis of gases in metals] Analiz gazov v metallakh.
Moskva, Izd-vo Akad.nauk SSSR, 1959. 390 p. (MIRA 13:1)
(Gases in metals) (Gases--Analysis)

SOV/75-14-4-14/30

5(2)

AUTHORS:

Kuznetsov, L. M., Makarov, Ye. S., Turovtseva, Z. M.

TITLE:

Quantitative Determination of Oxygen in the Lowest Titanium Oxides by Radiographic Analysis

PERIODICAL:

Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 463 - 465 (USSR)

ABSTRACT:

As the lowest titanium oxides the authors understand the solid solutions of oxygen in α -titanium with the composition $\text{TiO}_{0.42}$. Radiographic analyses of these compounds (Refs 1,2) show a steep course of the curves for the dependence of the lattice constant c on the oxygen content in α -titanium which crystallizes hexagonally. Based on this result, the radiographic method can be used for the quantitative determination of oxygen dissolved in α -titanium. In the paper under review, an experiment is made in this direction. The authors synthesized the lowest titanium oxides by saturating finely pulverized titanium with the calculated amount of gaseous oxygen at 500-550°. The powdery oxide preparations obtained were formed into small cylindrical columns at a pressure of

Card 1/3

Quantitative Determination of Oxygen in the Lowest
Titanium Oxides by Radiographic Analysis

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approximately 8000 kg/cm^2 , and kept for 15 hours in a quartz tube at $1000 \pm 20^\circ$ in order to obtain a uniform distribution of oxygen in the preparations. The annealed samples ($\text{TiO}_{0.05}$ and $\text{TiO}_{0.3}$) showed a reduction in weight of from $4 \cdot 10^{-4}$ - $7 \cdot 10^{-4} \text{ g}$, which was probably caused by sublimation. The obtained preparations were light-grey at the points of rupture, and became dark on being ground fine. The composition of the preparations was determined by the method of the vacuum melt (Ref 3). The radiographic determination of the lattice constant was carried out by the method of Debye-Scherrer. In order to obtain most accurate values for the lattice constants, the asymmetric method according to Straumanis and Jevins (Ref 4) was used. One of the most important conditions for the maximum accuracy of this method is the use of powdered samples (thickness $< 0.2 \text{ mm}$). The dimensions and conditions for the taking of X-ray spectra are indicated in the paper. The composition of the preparations under discussion, and the values of the corresponding lattice constants are shown in a table. The evaluation of the radiographs showed

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Quantitative Determination of Oxygen in the Lowest
Titanium Oxides by Radiographic Analysis

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that all lines of the samples with the composition $TiO_{0-0.5}$ correspond to the hexagonal, tightly packed structure of α -titanium. Beginning with the oxide $TiO_{0.5}$, a system of weak lines occurs in the radiographs which indicate a phase with variable composition on the basis of TiO . The boundary for the uniformity of solid solutions of oxygen in α -titanium lies therefore approximately at the composition $TiO_{0.48}$. A figure shows the dependence between the lattice constants c and the corresponding contents of oxygen in the lowest titanium oxides. The accuracy of the radiographic method used was ± 0.1 wt%. There are 1 figure, 1 table, and 5 references, 2 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy, AS USSR, Moscow)

SUBMITTED: April 24, 1958

Card 3/3

TUROVTSEVA, Z.M., kand. fiz.-mat.nauk.

Analyzing gases in metals; conference in Moscow. Vest. AN SSSR 28
no. 9:114-115 S '58. (NIRA 11:10)
(Gases in metals--Congresses)

AUTHOR: Turovtseva, Z. M., Candidate of
Physical and Mathematical Sciences SOV/30-58-9-43/51

TITLE: Analysis of Gases in Metals (Analiz gazov v metallakh)
Conference in Moscow (Soveshchaniye v Moskve)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 9, pp. 114 - 115 (USSR)

ABSTRACT: The conference took place in Moscow from June 24 to June 27. It was organized by: The Institut geokhimii i analiticheskoy khimii im.V.I.Vernadskogo i Komissiya po analiticheskoy khimii Akademii nauk SSSR (Institute of Geochemistry and Analytic Chemistry imeni V.I.Vernadskiy and the Committee for Analytic Chemistry of the AS USSR). 34 reports were heard and discussed. Yu.A.Klyachko reported on different forms of the state of gases in metals and the selection of corresponding methods of analysis. I.I.Kornilov spoke about the results of investigations of the phase diagram of the systems of the IV. column of elements containing oxygen and their importance for analytic chemistry. L.L.Kunin, Ye.M.Chistyakova dealt with physico-chemical bases of gas determination in metals by means of melting

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Analysis of Gases in Metals. Conference in Moscow

SOV/30-58-9-43/51

in a vacuum.

A.N.Zaydel' and his collaborators reported on the further development of the isotopic equilibrium method for the determination of hydrogen in metals.

Ye.D.Malikova's report dealt with problems of oxygen analysis in alkaline and alkali earth metals.

The members of the conference stated that it is the most important task in the field of analysis of gases in metals to increase the sensitivity and exactness. The development of spectrum methods of gas analysis in metals has to be promoted. The industrial production of devices has to be organized.

Card 2/2

TUR-OU-TSEVA, Z. M.

5(2)
AUTORS:
Kuznetsov, L. M., Makarov, Ye. S., Turetskaya, Z. M.

SOV/75-14-4-14/50
Quantitative Determination of Oxygen in the Lowest Titanium Oxides by Radiographic Analysis

PERIODICAL:
Zhurnal analitycheskoy khimii, 1959, Vol 14, No 4,
pp 445 - 445 (USSR)

ABSTRACT:
As the lowest titanium oxides the authors understand the solid solutions of oxygen in α -titanium with the composition $TiO_{0.95}$ to $TiO_{0.99}$. Radiographic analyses of these compounds (Ref. 1, 2) show a step-course of the curves for the dependence of the lattice constant a on the oxygen content in α -titanium which explains the results of the quantitative determination of oxygen dissolved in α -titanium. In the paper under review, an experiment is made in this direction. The authors synthesized the lowest titanium oxides by saturating finely pulverized titanium with the calculated amount of gaseous oxygen at 500-550°. The powdery oxide preparations obtained were formed into small cylindrical columns at a pressure of approximately 8000 kg/cm². The samples were sealed in quartz tube at 1000-200° in order to obtain a uniform distribution of oxygen in the preparations. The measured samples ($TiO_{0.95}$ and $TiO_{0.99}$) showed a reduction in weight of from 4.10 - 1.10%, which was probably caused by sublimation. The obtained preparations were light-gray at the point of rupture, and became dark on being ground fine. The determination of the preparations was determined by the method of the vacuum melt (Ref. 3). The radiographic determination of the lattice constant was carried out by the method of Debye-Scherrer. In order to obtain most accurate values for the lattice constants, the asymmetrical method was used. One of the most important conditions for the method is the accuracy of the method in the use of powder samples (thickness 0.2 mm). The dimensions and conditions for the taking of X-ray spectra are indicated in the paper. The composition of the preparations under discussion, and the values of the corresponding lattice constants are shown in a table. The evaluation of the radiographs showed

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Card 2/3

that all lines of the samples with the composition $TiO_{0.95}$ correspond to the hexagonal, tightly packed structure of α -titanium. Beginning with the oxide $TiO_{0.99}$ a system of weak lines occurs in the radiographs which indicate a phase with variable composition on the basis of TiO_2 . The change for the uniformity of solid solutions of oxygen in α -titanium from therefore appreciably at the composition $TiO_{0.99}$. A figure shows the dependence between the lattice constants a and the corresponding contents of oxygen in the lowest titanium oxides. The accuracy of the radiographic method was 0.1 at. There are 1 figure, 1 table, and 3 references, 2 of which are Soviet.

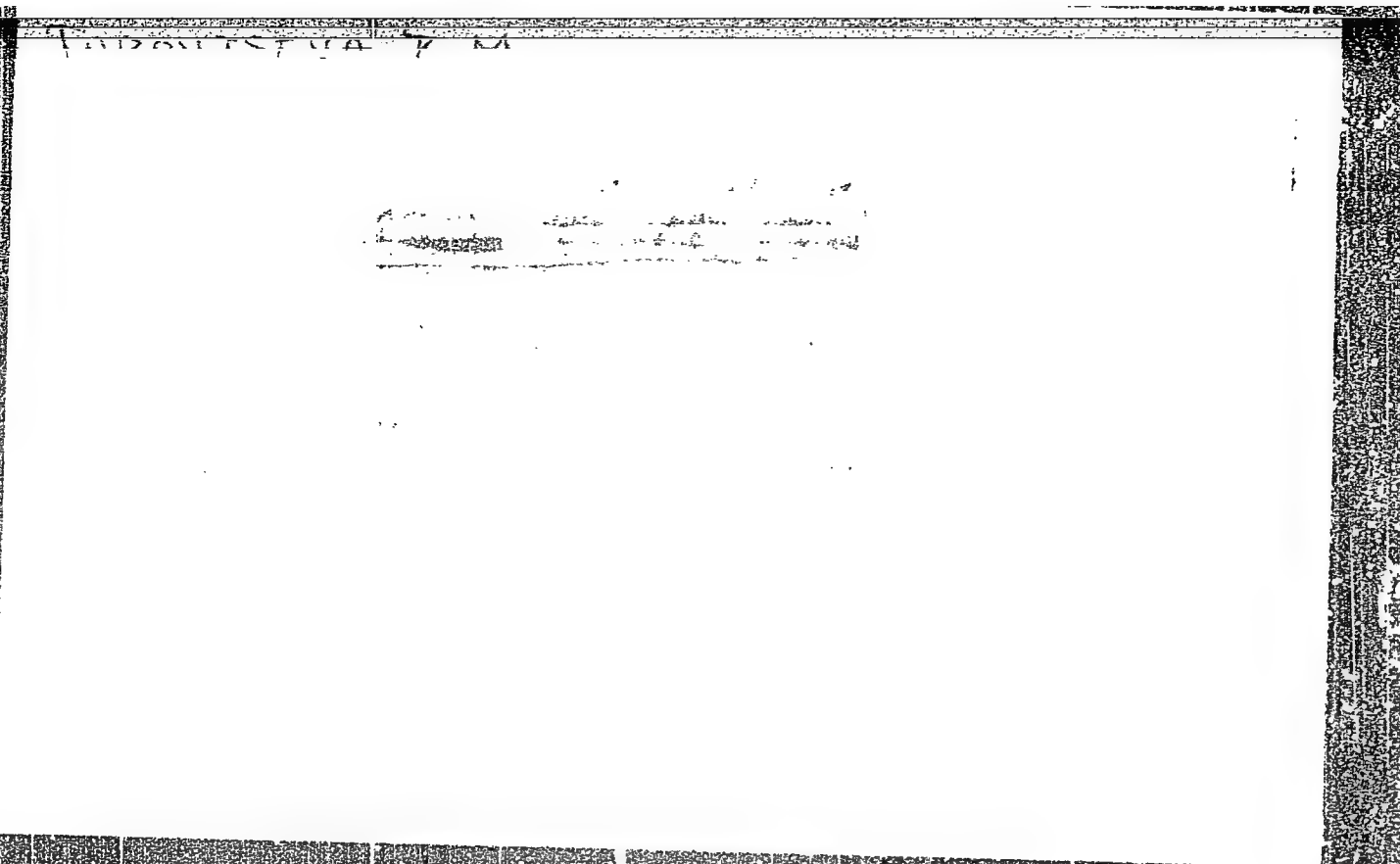
ASSOCIATION:
Institute of Chemistry, Academy of Sciences of the USSR, Leningrad (Institute of Geochemistry and Analytical Chemistry, Lenin V. I. Vernadsky, 43 USSR, Moscow)

SUBMITTED:
April 24, 1959

Card 3/3

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610009-5"

AUTHORS: Turovtseva, Z. N., Khalitov, R. Sh. 75-6-11/23

TITLE: The Determination of Oxygen and Hydrogen in Titanium (Opredeleaniye kislороda i vodoroda v titane).

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1957, Vol. 12, Nr 6, pp. 720-722 (USSR).

ABSTRACT: Both hydrogen and oxygen volatilize with the heating of titanium metal in vacuum. At 1000°C the hydrogen is completely removed from titanium. TiO_2 is not completely reduced with heating in a graphite crucible at 2000°C. The optimum conditions for the reduction of titanium oxide are achieved by filling the graphite crucibles to 1/3 of their volume with coarse-grained graphite powder. The expulsion of the gases takes place in three stages, viz. 5 minutes at 1000°C, 30 minutes at 1850°C and 10 minutes at 2100°C. The results obtained with the determination of oxygen and hydrogen in titanium by the vacuum-method attain the accuracy of the chlorine method. With series-analyses the errors amount to approximately 10%. The determination of 1,10⁻⁴% oxygen in titanium is possible. There are 2 tables, and 7 references, 2 of which are Slavic.

Card 1/2

The Determination of Oxygen and Hydrogen in Titanium.

75-6-21/23

ASSOCIATION: Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AN SSSR-Moscow (Institut geokhimii i analiticheskoy khimii imeni V. I. Vernadskogo AN SSSR-Moskva).

SUBMITTED: October 21, 1956.

AVAILABLE: Library of Congress.

1. Titanium-Oxygen determination
2. Titanium-Hydrogen determination
3. Titanium oxide-Reduction

Card 2/2

L.N. TURCVTSEVA, (N.F. Litvinova)

"DETERMINATION OF GASEOUS IMPURITIES IN STRUCTURAL AND OTHER MATERIALS"

by Z. M. Turcvtsava, N. F. Litvinova

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept 1958

TURCVTSEVA, Z. M.

AUTHOR: Turovtseva, Z.M.

32-12-14/71

TITLE: The Methods of Determining Gas in Ferrous Metals (Metody opredeleniya gazov v chernykh metallakh).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1432-1436 (USSR)

ABSTRACT: The present survey is divided into 3 chapters: The determination of gas in steel by the method of melting in the vacuum. This method, which was suggested for the first time by Oberhoffer, is the one that is the most used in the USSR. The greatest attention was recently paid to the further development of corresponding apparatus, as also to the investigation of the effect of various components of alloys on the processes of analysis. Determination of the oxygen contents in steel according to the method mentioned in principle presents no difficulties, but, e.g., the absorption of the carbon acid in metal sublimation causes several effects which disturb the processes of analysis (they are enumerated). In order to diminish the disturbing absorption of the gases to be extracted a special device of quartz glass was constructed by the Central Research Institute for Iron Metals, which is introduced into the gas flow hereby diminishing its absorption activity. - In the chapter: Determination of

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The Methods of Determining Gas in Ferrous Metals

32-12-14/71

oxygen during melting in the argon atmosphere a corresponding apparatus is recommended, which consists of the following parts: A vessel for "ascarite" and magnesium perchlorate; a holder for the samples; an induction furnace, a monostat; a measuring reagent (Shulz); a capillary catcher and manometer; an uranium furnace; 6 brass faucets; a glass vat with magnesium perchlorate. Under the conditions of the argon atmosphere the volatility of the Ti, Mn, and Al-components is diminished and the possibility of the formation of a coating is excluded. In the chapter: Determination of oxygen in carboniferous steel by means of the D.C. arc the possibility of applying methods of spectral analysis is dealt with. In this connection a special additional device to the spectrograph is suggested, which consists of a high vacuum system and a gas purifier, and which possesses a special excitation camera. In the chapter: Determination of oxygen in iron by the isotope method it is said that this method makes it possible to obtain accurate results, but in view of the fact that it takes too much time and requires the use of apparatus, it is (in the USSR) for the time being used only for the control of other methods. In the case of the analysis carried out for the determination of the gas

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The Methods of Determining Gas in Ferrous Metals

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content in steel this method is not yet being employed in the USSR. Further research work in this field is recommended. There are 4 figures, 4 tables, and 29 references, 4 of which are Slavic.

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1. Ferrous metals-Gas determination
2. Iron-Oxygen determination-Isotope method
3. Steel-Oxygen determination-D.C. arc method

"APPROVED FOR RELEASE: 04/03/2001

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610009-5"

TUROVTSEVA, Z.M.
TUROVTSEVA, Z.M.

Methods for the determination of gases in ferrous metals; a survey.
Zav. lab. 23 no.12:1432-1436 '57. (MIRA 11:2)
(Gases in metals) (Iron--Analysis)

TUROVTSEVA, Z.M.; LITVINOVA, N.P.; MIKHAYLOVA, G.V.; NOSKOV, A.S.; KHALITOV, R.Sh.

Apparatus for determining the content of gases in metals [with summary in English]. Zhur.anal.khim. 12 no.2:208-213 Mr-Apr '57. (MLRA 10:7)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo akademii nauk SSSR, Moskva.

(Chemical apparatus) (Gases in metals)

TUROVTSEVA, Z.M. [deceased]; MALYSHEV, V.I.; NOSKOV, A.S.

Determination of nitrogen and oxygen in UF_6 . Zhur. anal. khim.
20 no.12:1353-1358 '65. (MIR: 18:12)

1. Submitted April 21, 1964.

VASSERMAN, A.M.; (POT-111574), Z.M. [deceased]

Pulsed heating method for rapid determination of oxygen in refractory materials and metals. Report No.1: Description of the method. Some examples of its application. Zhur. anal. khim. 20 no.12:1359-1365 '65. (MIRA 18:12)

1. Institut geokhimi i analiticheskoy khimii imeni V.I. Vernadskogo Ak SSSR, Moskva.

L 36825-66 EWT(m)/EWF(t)/ETI IJP(c) ES/WW/JW/JD/JG
 ACC NR: AP6014143 SOURCE CODE: UR/0075/65/020/012/1353/1358 36
 AUTHOR: Turovtseva, Z. M. (Deceased); Malyshov, V. I.; Moskov, A. S. E
 ORG: none
 TITLE: Determination of nitrogen and oxygen in uranium hexafluoride
 SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 12, 1966, 1353-1358
 TOPIC TAGS: quantitative analysis, oxygen, nitrogen, uranium compound, fluoride
 ABSTRACT: The method described is based on measurement of the intensity of the nitrogen bands $\lambda = 4278 \text{ \AA}$ or $\lambda = 4236 \text{ \AA}$ and the oxygen line $\lambda = 7772 \text{ \AA}$ under special discharge conditions in an enriched mixture of air with UF_6 . The concentrations of nitrogen and oxygen are determined by a nomograph obtained with the use of specially prepared standard solutions. The article contains detailed schematic diagrams of the apparatus used. It then proceeds to a description of a photoelectrical method for determination of the amount of air in UF_6 . The sensitivity of the method is approximately the same as that of the photographic method. Orig. art. has: 6 figures.
 SUB CODE: 07/ SUBM DATE: 21Apr64/ OTH REF: 001
 Card 1/1 UDC: 543.70

Turowska, A.

POLAND / Chemical Technology, Chemical Products and Their
Application. Part 3: - Treatment of Solid Combustible
Minerals.

H-21

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12485.

Author : A. Turowska, B. Jedrzejczuk.

Inst : Institute of Ministry of Metallurgy.

Title : Interferometric Method of Determination of Benzene and Some
Other Impurities in Coal Gas.

Orig Pub : Prace inst. Min-wa hutn., 1957, 9, No 2, 87 - 92.

Abstract : The interferometric method was applied to the determina-
tion of benzene, ammonia, hydrogen sulfide and naphthalene
contents in gases of coke-by-product and gas works; methods
of interferometer calibration, technical conditions to be
satisfied by activated carbon and the condition, under which

Card 1/2

POLAND / Chemical Technology, Chemical Products and Their
Application. Part 3. - Treatment of Solid Combustible
Minerals.

H-21

Abé Jour : Referat. Zhur. Khimiya, No 4, 1958, 12465.

Abstract : analyses must be carried out, were developed. It is shown that this method is quite justified for benzene determination, because it is simple enough, sufficiently accurate and needs only 50 min. for an analysis; if the technological regime of coking was changed, or the charge was altered, a recalibration of the device is necessary. The method is also applicable to the determination of ammonia and hydrogen sulfide in raw gas, but it proved to be useless to the determination of naphthalene.

Card 2/2

- POLAND/Chemical Technology - Chemical Products and Their Applications - Treatment of Solid Fuels.

H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 37479

Author : Turowska, A., Jedrzejczyk, B.

Inst : -

Title : Chromatographic Analysis of Gases.

Orig Pub : Gaz. Woda, techn. sanit, 1957, 31, No 7, 266-269

Abstract : A chromatographic method for the analysis of coal gas has been established. The apparatus consists of two chromatographic columns 0.5-0.6 cm in diameter. One column is 280 cm long and contains activated carbon (I), the other is 180 cm long and is filled with zeolite (II). Czechoslovak carbon "Supersorbon" 0.20-0.25 mm mesh or Polish coals NG and HG 0.2-0.4 mm mesh, dried at 140°C, may be used as (I). CO₂, used as a gas carrier, is stripped beforehand of H₂S, HCl and moisture (air content ~ 0.05%), and is passed through the columns at a

Card 1/3

POLAND/Chemical Technology - Chemical Products and Their
Applications - Treatment of Solid Fuels.

H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 37479

rate of 40 ml/min. About 4 ml of test gas are introduced, initially, into the first column, from which components are eluted with CO_2 into a micronitrometer (MN), filled with a 50% solution of KOH, and equipped with two graduated, 21 cm scales. The lower scale has 0.02 ml divisions; while the upper, narrower one has 0.01 ml divisions. Bubbles of H_2 , $\text{N}_2 + \text{O}_2$ mixture, CO and CH_4 appear subsequently in (MN).² Their volume is measured separately. The determination time ~ 20 min., error is $\pm 0.6\%$. Lapse of time between the separation of N_2 O_2 and CO is ~ 10 sec. An increase of column length to 380 or 460 cm still doesn't permit the separation of N_2 from O_2 . CO is separated together with $\text{N}_2 + \text{O}_2$, when 180 cm long column is used. In order to determine hydrocarbons of higher number of C atoms, another 4 ml of test gas sample are chromatographically analyzed in the

Card 2/3

9

POLAND/Chemical Technology - Chemical Products and Their
Applications - Treatment of Solid Fuels.

H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 37479

column containing (II).

Volumes are measured in MN in the following order:

$H_2 + CO + N_2 + O_2 + CH_4, C_2H_6, C_2H_4, C_2H_2, C_3H_8, n$

C_4H_{10} , iso C_4H_{10} .

Card 3/3

TUROWSKA, A

3706

628.834.2/4 : 645.728 : 615.9

Turowska A., Jędrzejczyk B. The Problem of Air Toxicity in Gasworks.

„Zagadnienie toksyczności powietrza w pomieszczeniach gazowni-
cznych”

One of the most dangerous components of the atmosphere in gasworks is carbon monoxide. It is imperative that it be determined as accurately and rapidly as possible. The authors choose, for the determination of CO concentration, the colorimetric method, using palladium chloride. This method is based on the principle of the reaction of CO with PdCl_2 , which causes metallic palladium to be liberated. The latter is dark in colour, and is then measured colorimetrically. The reaction may be expressed by the following formula: $\text{PdCl}_2 + \text{CO} + \text{H}_2\text{O} = \text{Pd} + \text{CO}_2 + \text{HCl}$. The tables contain results of determinations of CO content in the atmosphere of different gasworks departments. Attention is drawn to the necessity of proper ventilation of the premises by natural and mechanical means.

①

27 27 5
 27 Silver oxide as promotor and inhibitor of $\text{Fe}(\text{OH})_2$
 27 $\text{Cu}(\text{OH})_2$ double catalyst. Alfons Krause and Alicja Tur-
 owska (Univ. Poznań, Poland). *Roczniki Chem.* 32, 975-7

(1958)(German summary).—A catalyst prepd. by simul-
 taneous pptn. of Fe and Cu hydroxides is very active in the
 oxidation of HCOOH with H_2O_2 . Added Ag_2O acts as a
 promotor or inhibitor depending on its content and the
 reaction temp. The catalyst contg. the metals in the ratio
 1 Fe: $\frac{1}{2}$ Cu: $\frac{1}{2}$ Ag at 37° is more active than that contg.
 1 Fe: $\frac{1}{2}$ Cu, although pure Ag_2O is inactive. At 70° , Ag_2O
 acts as an inhibitor, if present in the above ratio, and even
 at 37° if its content is higher. A qual. explanation is sug-
 gested. A. Kreglewski

ANALYTICAL METHODS OF NITROGEN OXIDE DETERMINATION IN
purified coal gas. Alicja Turowska (Zakład Gazownictwa
i Chł.PW, Warsaw) and Barbara Jędrzejczyk. *Gas, Woda i
Tech. Sanit.* 29, 41, -14 (1955).—The possibility of adapting
existing analytical methods of detn. of NO through its
oxidation to NO₂ in the purified coal gas was investigated.
Three methods were tried: (1) oxidation with KMnO₄ and
volumetric detn. of the amt. of the reagent consumed; (2)
the Miligan and Sapoznikow method (cf. *Jolniam, C.A.* 47,
2337); (3) permanganate method. The 1st 2 were found
unsuitable because of secondary reactions of the reagents
with the gas components. Method 3 was found to give
reliable results when analyzing gas of an NO content of the
order of 10⁻⁴ ml./l., and by operating with small samples of
about 20 l. The gas flows with a rate of 20 l./hr. through
an app. consisting of: pressure regulator, flowmeter, washing
bottle with 30% soln. of KOH to absorb H₂S, a sliding bottle
with 0.1N H₂SO₄ to bind NH₃, a bulb with a NO₂ absorbing
agent, another pressure regulator, washing bottle with
KMnO₄ which oxidizes NO to NO₂, 3 washing bottles each
contg. 20 ml. of a soln. of a mixt. of sulfanilic acid with 1-
naphthylamine acidified with glacial AcOH, and lab. gas-
meter. The solns. from the last 3 washing bottles are then
united and their light extinction detd. with a Pulfrich
photometer in comparison with a standard. The obtained
values represent 35% of the amt. of NO contained in the gas
sample.
Henry W. Lawendel

TUROWSKA, Maria

Detection and determination of aliphatic alcohols by photoelectric measurements of the chemiluminescence of acridine derivatives.
Chem anal 6 no.6:1051-1060 '61.

1. Department of Inorganic Chemistry, University, Lodz.

TUROWSKI, T.

Unduly prolonged waiting time for the repair of locomotives.

P. 292 (Przegląd Kolejowy Mechaniczny. Vol. 8, no.10, Oct. 1956, Warszawa, Poland)

Monthly Index of East European Accessions (MEAI) LC. Vol. 7, no. 2,
February 1958

BUDNIKOV, M.S., doktor tekhnicheskikh nauk professor, redakter; TUROVSKIY,
B., redakter; GABSHANOV, A., tekhnicheskiy redakter.

[Specifications for mass-produced apartment] Tekhnologicheskoe proek-
tirovaniye pri vozvedenii seriinykh zhilykh domov. Pod red. M.S.Budni-
kova. Kiev, Izd-vo Akademii arkhitektury USSR, 1955. 153 p.(MIRA 9:5)

1.Akademiya arkhitektury USSR. Nauchno-issledovatel'skiy institut
stroitel'noy tekhniki.
(Apartment houses)

"APPROVED FOR RELEASE: 04/03/2001

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610009-5"

GORECKI, Henryk; TUROWICZ, Andrzej

Root locus method of characteristic equations. Archiw automat
10 no.1:11-27 '65.

1. Department of Automation and Electronics of the School of
Mining and Metallurgy, Krakow. Submitted April 4, 1964.

TUROWICZ, A. (Tyniec)

Solutions of differential equations according to E.E.Wiktoroweki.
Annales Pol math 16 no.3:377-380 '65.

1. Krakow Branch of the Institute of Mathematics of the Polish
Academy of Sciences. Submitted March 7, 1964.

1. Characteristics of the root locus method

2. Characteristics of the root locus method

AUTHOR: Gorecki, H. (Guretski, G.); Turowicz, A. (Turovich, A.)

TITLE: Characteristic equation root locus method

1. Characteristics of the root locus method

2. Characteristics of the root locus method

location, complex root location, automatic, teleoperated, experimental, equation

1. Characteristics of the root locus method

2. Characteristics of the root locus method

Card 1/2

1. The first

2. The second

3. The third

4. The fourth

5. The fifth

6. The sixth

7. The seventh

8. The eighth

9. The ninth

PLIS, A. (Krakow); TUROWICZ, A. (Tyniec)

On chords of convex bodies. Col math 12 no.1:87-89 '64

1. Mathematical Institute, Polish Academy of Sciences.

GOECKI, H.; TUROWICZ, A. (Krakow)

Trinomial algebraic equations. Annales Pol math 14 no.3:355-361
'64.

TUROWICZ, A.

Emission zones of trajectories and quasi trajectories of non-linear control systems. Bul Ac Pol mat 11 no.2:47-50 '63.

1. Instytut Matematyczny, Oddzial Krakow, Polska Akademia Nauk. Presented by T. Wazewski.

TUROWICZ, A.

Remark on the emission zones of trajectories and quasi trajectories
on nonlinear control systems. Bul Ac Pol mat 11 no.5:241-243 '63.

1. Instytut Matematyczny, Oddzial Krakow, Polska Akademia Nauk.
Presented by T. Wazewski.

TUROWICZ, A.

Trajectories and quasi trajectories of nonlinear controllable systems. Bul Ac Pol mat 10 no.10:529-531 '62.

1. Instytut Matematyczny, Oddzial Krakow, Polska Akademia Nauk.
Presented by T.Wazewski.

TUROWICZ, A.

Remark on R. V. Gamkrelidze's work concerning optimum gliding ratio. Bul Ac Pol mat 10 no.11:557-558 '62.

1. Instytut Matematyczny, Oddzial Krakow, Polska Akademia Nauk.
Presented by T. Wazewski.

GORECKI, H.; TURDOWICZ, A.B. (Krakow)

On the solution of algebraic equations by means of the Euler method.
Annales pol math 12 no.2:185-190 '62.

TUROWICZ, A.

TUROWICZ, A. Thermal welding of iron cable wires. p. 10. Vol. 25, no. 1,
Jan. 1956. WIADOMOSCI TELEKOMUNIKACYNE. Warszawa, Poland.

SOURCE: East European Accessions List (FFAL) LC VOL. 5, No. 6, June 1956

TUROWICZ, A.B. (Tyniec)

On the approximation of the roots of positive numbers. Annales pol
math 8 no.3:265-269 '60. (EEAI 10:1)
(Roots, Numerical)

WITKO, Jan (Bystrzyca Slaska); TUROWICZ, St., mgr. inz. (Krakow)

Two opinions on CaCl_2 and NaCl chlorides. Przegl budowl
i bud mieszk 33 no.11:693-694 N '61.

TUROWICZ, Stanislaw

(Nowa Huta)

Application of CaCl_2 and NaCl in concrete during winter.

Przeegl budowl i bud mieszk 33 no.1:49-52 Ja '61

COUNTRY : Poland
CATEGORY :

b-9

ABST. JOUR. : RZKhim., No. 22 1959, No.

77826

AUTHOR : Krause, A. and Turowska, A.

INST. : Not given

TITLE : On the Optimum Composition and Activity of Two-Component Catalysts as a Function of the Reaction Temperature

ORIG. PUB. : Roczniki Chem, 32, No 5, 1195-1197 (1958)

ABSTRACT : The authors have investigated the oxidation of HCOOH with H_2O_2 at 37-80° in the presence of the two-component catalyst $Fe(OH)_3-Cu(OH)_2$. It is shown that as the reaction temperature is changed, the maximum activity of the catalyst depends on its composition. At 37° the most active catalyst was found to be a mixture of hydroxides in which the Fe : Cu atomic ratio is 1 : $\frac{1}{2}$, while at 50-80° optimum activity was obtained with a mixture corresponding to an Fe : Cu ratio of $\frac{1}{2}$: 1.
O. Polotnyuk

CARD: 1/1

JEDREJCZYK, Barbara, mgr.; JEDKACZ, Janina, mgr.; TURKUSKA, Alicja, mgr.

Certain analytic and production problems in the gas industry
of the German Democratic Republic. Gaz woda techn sanit 38
no.5:152-154 My '62

1. Central Gas Engineering Laboratory, Warsaw.

TURKOWSKA, Anna

27 Silver oxide as promoter and inhibitor of a $\text{Fe}(\text{OH})_2/\text{Cu}(\text{OH})_2$ double catalyst. Alfons Kratze and Alicja Turkowska (Univ. Poznań, Poland). *Roczniki Chem.* 32, 616-1

(1958)(German summary).—A catalyst prep'd. by simultaneous pptn. of Fe and Cu hydroxides is very active in the oxidation of HCOOH with H_2O_2 . Added Ag_2O acts as a promoter or inhibitor depending on its content and the reaction temp. The catalyst contg. the metals in the ratio 1 Fe: $\frac{1}{2}$ Cu: $\frac{1}{2}$ Ag at 37° is more active than that contg. 1 Fe: $\frac{1}{2}$ Cu, although pure Ag_2O is inactive. At 70° , Ag_2O acts as an inhibitor, if present in the above ratio, and even at 37° if its content is higher. A qual. explanation is suggested. A. Kręglewski

EUROWSKA, A.; KRAUSE, A.

On the behavior of zinc hydroxide as a component of a compound catalyzer of amphoteric metal hydroxides. p. 497

ROCZNIKI CHEMII. (Polska Akademia Nauk) Warszawa, Poland, Vol. 33, no. 2, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 9, September 1959.
Uncl.

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THURSDAY

APPROVED FOR RELEASE: 04/03/2001

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TURKOWSKA ALIUS A

TUROWSKA, A.

POLAND / Physical Chemistry. Kinetics. Combustion. Explosions. Topochemistry. Catalysis. B

Abs Jour : Ref Zhur - Khimiya, No 12, 1959, No. 41680

Author : Krause, Alfons; Turowska, Alicja
Inst : Not given
Title : Silver Oxide as a Promoter and Inhibitor
of a Two-Component Catalyst $\text{Fe}(\text{OH})_3/\text{Cu}(\text{OH})_2$

Orig Pub : Roczn. chem., 1958, 32, No 4, 975-977

Abstract : An air-dried catalyst (C) obtained by a simultaneous precipitation of $\text{Fe}^{(+3)}$ and $\text{Cu}^{(+2)}$ hydroxides greatly accelerates HCOOH (0.1 n. solution) oxidation with hydrogen peroxide (0.6% solution). Introduction of Ag_2O into the above catalyst

Card 1/3

POLAND / Physical Chemistry. Kinetics. Combustion.
Explosions. Topochemistry. Catalysis.

B

Abs Jour : Ref Zhur - Khimiya, No 12, 1959, No. 41680

as a third component produces various effects, depending on C composition and on the reaction temperature. It has been established that Ag_2O serves either as a catalyst promoter or as its inhibitor. For example, C consisting of Fe: 1/3 Cu: 1/3 Ag is 1.26 times more active than C consisting of Fe: 1/3 Cu at the reaction time of 400 minutes and at a reaction temperature of 37° . This is true in spite of the fact that Ag_2O by itself is inactive in the reaction. An increase of the reaction temperature to 70° causes Ag_2O to behave as an inhibitor. Retarding action

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POLAND / Physical Chemistry. Kinetics. Combustion. Explosions. Topochemistry. Catalysis. B

Abs Jour : Ref Zhur - Khimiya, No 12, 1959, No. 41680

of Ag_2O was also obtained at 37° if its content in the C is increased (Fe: $1/2$ Cu: $1/2$ Ag). The duality of the catalytic action of Ag_2O may be explained by the formation of complex compounds from separate components of the catalyst which possess various activities. Upon transferring of the three-component C into the solution (prolonged boiling in HCOOH solution), a homogeneous mixture of $\text{Fe}^{+3} + \text{Cu}^{+2} + \text{Ag}^+$ ions is obtained. This mixture has been shown to be only slightly active.
-- O. Polotnyuk

Card 3/3

TEROMORA, A.; KRAMS, A.

The optimum composition and activity of a two-component catalyst depending on the reaction temperature. p. 1195

ROZNIKI CHEMII. (Polska Akademia Nauk) Warszawa/ ^{POLAND} Vol. 32, no. 5, 1958

Monthly List of East European Accessions (EEAI) LC, Vol. ⁸β, no. 7, July 1959

UNCL.

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462C
The behavior of zinc hydroxide as the component of a catalyst formed by amphoteric hydroxides of metals,

Alfons Krause and Alicja Turowska (Univ. Poznań, Poland). *Roczniki Chem.* 33, 497-50 (1959) (German summary).

—The activity in the $\text{HCOOH}/\text{H}_2\text{O}_2$ system of the following mixed-hydroxide catalysts was investigated at 37 and 50° at the at. ratios of 1 Fe: $\frac{1}{2}$ Cu and 1 Fe: $\frac{1}{2}$ Cu: $\frac{1}{2}$ Zn. Both were prepd. by simultaneous pptn. of the hydroxides by means of 1N NaOH at 20°. Their activities were practically identical at 37°; at 50° the activity of 1 Fe: $\frac{1}{2}$ Cu was much higher. Selection of a promotor on the basis of Fermi's potential seems to be insufficient because its activity also depends on temp. A. Kreglewski

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610009-5"

TUROWSKA, Alicja, mgr.

New methods of technological research in gas engineering. Gaz
woda tech sanit 36 no.5:175-177 My '62.

PRZYBYLKIEWICZ, Zdzislaw; POREBSKA, Alicja; ZEMBUROWA, Krystyna;
TURAWSKA, Bozena

Immunoelectrophoretic analysis of rabbit precipitins against human serum proteins. I. Homologous reaction. Acta med. pol. 4 no.1: 105-125 '63.

1. Department of Medical Microbiology, Medical Academy, Cracow
Director: Prof. Dr. Z. Przybylkiewicz. Serum and Vaccine Production
Laboratories, Cracow Director: Dr. Z. Moszczanski.
(PRECIPITINS) (IMMUNOELECTROPHORESIS)

PRZYBYLKIEWICZ, Zdzislaw; POREBSKA, Alicja; ZEMBUROWA, Krystyna; TUROWSKA,
Bozena

Immunoelectrophoretic analysis of rabbit precipitins against human
serum proteins. II. Heterologous reaction. Acta med. pol. 4 no.1:
127-142 1963.

1. Department of Medical Microbiology, Medical Academy, Cracow
Director: Prof. Dr. Z. Przybylkiewicz Serum and Vaccine Production
Laboratories, Cracow Director: Dr. Z. Moszczanski.
(IMMUNOELECTROPHORESIS) (PRECIPITINS)

TURCOWSKA, Bozena; SOBOL, Andrzej

Immunization of goats for the production of diagnostic sera capable of agglutinating *Salmonella typhi* O, *Salmonella typhi* H and *Shigella flexneri*. Med.dosw.mikrob. 13 no.3:279-284 '61.

1. Z Zakladu Preparatow Diagnostycznych Wytwarni Surowic i Szczepionek w Krakowie.

(IMMUNE SERUMS) (*SALMONELLA TYPHOSA* immunol)
(*SHIGELLA* immunol)

MAREK, Zdzislaw; JAEGERMANN, Kazimierz; TUROWSKA, Bozena

Determination of the group of proteins using the method of electric precipitation on agar gel (electroimmunoprecipitation). Folia med. Cracow. 6 no.1:83-91 '64

KOBIEŁA, Jan; TURCWSKA, Bożena; GAWRZEWSKI, Włodzisław; URASINSKI, Ignacy

Anti-M agglutinins in the serum of a female patient. Arch.
immun. ther. exp. 12 no.6:667-669 '64

1. Institute of Forensic Medicine, School of Medicine, Cracow,
and IInd Clinic of Internal Diseases, School of Medicine,
Cracow.

TUROWSKA, Bozena; TUROWSKI, Gabriel

Endotoxin as an adjuvant. III. Studies on the production of a serum against the Gc system. Med. dosw. mikrobiol. 16 no.4: 339-343 '64

1. Z Zakladu Medycyny Sadowej Akademii Medycznej (Kierownik: doc. dr. J. Kobieta) i z Wytworni Surowio i Szczepionek (Dyrektor: dr. Z. Moszczanski) w Krakowie.

KOBIELEA, Jan; MAREK, Zdzislaw; TURCOWSKA, Bozenna

The Gc group system in the Polish population. Folia med. Cracov.
6 no.3:355-361 '64.

TUROWSKA, Eozena; KOBIELA, Jan; doc. dr.; MIECZNIKOWSKA, Maria;
JUGOWSKA, Elzbieta.

Group system of haptoglobins in newborn infants. Med. dosw.
microbiol. 17 no.1:67-70 '65.

1. Z Zakładu Medycyny Sadowej Akademii Medycznej (Kierownik:
doc. dr. J. Kobiela) i z Oddziału Ginekologiczno-Położniczego
Szpitala im. G. Narutowicza w Krakowie.

TUROWSKA, I.

GANCZARSKI, A.; DUNIN-HORKAWICZ, H.; HOROSZEWICZ, J.; KASPEROWICZ, J.; ORLOWSKA, I.;
STEMPIEN, R.; TUROWSKA, I.; WISNIEWSKA, A.

Effect of isonicotinic acid hydrazide on morphology and biology
of *Mycobacterium tuberculosis*, on saprophytic bacteria, and on
experimental tuberculosis in laboratory animals. Med. dosw. mikrob.
5 no.3:326-329 1953. (CML 25:5)

1. Lodz.

*Pharmaceutical, formula
Thymus 18*

Essential oils present in the herbs of *Thymus* in Poland.
I. Turowska, J. Celarek, and K. Smolén (Z. Zakładu Bot.
Farm. Akad. Med., Kraków, Poland). *Polish Abstr.
Umiejtnosci, Prace Kom. Nauk Farm., Dissertationi
Pharm.* 3, 129-48 (1951) (French summary). Six specimens
of herbs from a government-owned plantation in Zarków
were studied. The concn. of oil in the plants, detl. by the
method of Tusting and Coulter, varied from 0.61-2.5%.
The distd. oil had d. 0.9030-0.9533, optical rotation
-0.43°-+1.76°, n_D^{20} 1.418-1.521, phenol content 39.5-46%
(by the method of Goldmeister) or 35.39-38.40% (by the
method of Kremer and Schreiner); and contained linalool
and borneol 11.21-28%. Several other species of *Thymus*
herbs were studied with no gross differences. The dif-
ferences that were noted were due only to the parts of the
plants studied.
L. J. Piotrowski

1ST AND 2ND COPIES										3RD AND 4TH COPIES									
PROCESSES AND PROPERTIES INDEX																			
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<p>Vital conditions of ferruginous bacteria. I. <u>TURKOWSKA</u>. (Bull. Acad. Polonaise, 1930, B, 255— 283).—Iron bacteria are found in certain wells and other waters of Poland in which the iron content is usually greater than 2 mg. per litre and the reaction is between pH 5.88 and 7.40. Large concentrations of salts appear to be unfavourable. The bacteria are able to withstand temperatures down to 0°. W. O. KERMAK.</p>																			
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Vital conditions of ferruginous bacteria. (MILLER) I. TURONAKA. *Bull. intern. géod. polonaise* 1029B 1, 255-52. — Fe bacteria are found in certain wells and other waters of Poland in which the Fe content is usually greater than 2 mg. per l. and the reaction is between pH 5.85 and 7.80. Large concns. of salts appear to be unfavorable. The bacteria are able to withstand temps. down to 0°. B. C. A.

ASB-SLA DETAILOROLOGICAL LITERATURE CLASSIFICATION

Essential oils of acclimatized and indigenous Labiales in Poland. I. Turawski, J. Stępień, H. Tomaszewska, and M. I. Isakowska. *Polish Acad. Umiętności, Prace Komisji Nauk. Farm., Dissertationes Pharm.* 1, 117 (1949). The following data are recorded for essential oils from plants grown in Poland (W is water content and R is essential-oil content of the plant material, both as g. per 100 g.; A, B, and C are the acid, ester, and acetyl values of the oils): *Salvia officinalis*, leaves W 0.20-12.21, R 2.12-2.74 (dm 0.012, n_D²⁰ 1.463, 1.468, [α]_D²⁰ + 4°35' to + 0°35', A 0.80-0.90, B 4.41-6.6, C 50.16-60.72), petioles W 11.74, R 0.92 (dm 0.923, n_D²⁰ 1.474, [α]_D²⁰ + 5°42'); *Nepeta cataria* var. *catardora*, leaves W 14.53, E 1.79 (dm 0.893, n_D²⁰ 1.459, A 0.56, B 5.74, C 2.13); *Nepeta arvensis*, stems W 14.23, E 1.04 (dm 0.872, n_D²⁰ 1.474, [α]_D²⁰ -22°48', A 0.36, B 5.39, C 109.3); *Origanum vulgare*, stems W 11.6-15.9, E 1.25-2.18 (dm 1.445, n_D²⁰ 1.464, [α]_D²⁰ -7.3° to -8.7°, monomyl acetate content 24.50-34.31%); *Mentha piperita*, W 10.70-17.20, R 1.93-2.60 (dm 0.873-0.903, n_D²⁰ 1.468-1.475, [α]_D²⁰ -20°35' to -22°40', menthol content 47.49-51.81%).

POLAND / Cultivated Plants. Medicinal. Essential Oils. Toxins. M-7

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25246

Author : Turowska, I., Olesinski, A., Tum-Smajda, K. I.,
Cybura, R.

Inst : Not given

Title : Investigation of Several Medicinal Flavoring
Plants of the Family Labiatae. Part 1. Ocimum.

Orig Pub: Dissert. pharmac. PAN, 1956, 7, 36-101 (Polish;
res. Russ., Eng.)

Abstract: A survey of the contemporary state of research on
the family Ocimum is given. Through selection
work, done on material obtained from Yugoslavia
and Portugal, 30 forms have been selected, related
to the species *O. basilicum*, *O. sanctum* and *O.*
minimum. Information is given on the output of

Card 1/2

COUNTRY : Poland
CATEGORY : Analytical Chemistry--General

E-1

ABS. JOUR. : RZKhim., No. 22 1959, No.

78256

AUTHOR : Michalski, E. and Turowska, M.

INST. : Not given

TITLE : Derivatives of Diacridine as Chemiluminescent Indicators. I.

ORIG. PUB. : Chem Analit, 3, No 3-4, 599-607 (1958)

ABSTRACT : The feasibility of the application of the nitrates of N,N'-dipropyl- (I), N,N'-ditolyl- (II), N,N'-diphenyl- (III), and N,N'-diallyldiacridine (IV) as chemiluminescent indicators (CI) in the titration of strong acids with strong bases has been investigated. 0.01 N, 0.1 N, and 0.5 N solutions of HCl and NaOH were used in the titrations. To the solutions to be titrated are added 5 ml of a 0.04% solution of CI and 5 ml of 3% H₂O₂; the resulting solution is titrated in the dark (magnetic stirring) with CO₂-free NaOH. The endpoint

CARD: 1/4

COUNTRY : Poland
CATEGORY :

E-1

ABS. JOUR. : RZKhim., No. 22 1959, No.

78256

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : of the titration is determined by the appearance of yellow-green chemiluminescence throughout the solution on the addition of 1 drop of NaOH; in the titration of NaOH solutions with HCl solutions the endpoint is determined by the disappearance of the yellow-green chemiluminescence. Potentiometric measurements have shown that the indicator color change takes place at pH 8.6 for I, 8.5 for II, 8.2 for III, and 8.1 for IV. In order to determine the accuracy of the titrations, duplicate titrations were made using bromthymol blue

CARD: 2/4

COUNTRY : Poland E-1
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 22 1950, No. 78256
 AUTHOR :
 INST. :
 TITLE :

ORIG. PUB. :

ABSTRACT : and phenolphthalein as indicators. The relative differences in the results obtained from titrations of HCl solutions with NaOH solutions using CI are 0.12% when compared with the results obtained when bromthymol blue is used and 0.05% when phenolphthalein is used as the comparison standard. The addition of aliphatic alcohols (methyl, ethyl, n-propyl, isobutyl) to the solutions to be titrated increases the intensity of luminescence and the accuracy of the titration.

CARD: 3/4